AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-12. (canceled)

13. (currently amended) An additive for an electrolyte solution for an electrochemical device, said additive comprising a compound represented by the following formula:

wherein

 R_1 and R_4 are each independently selected from the group consisting of a hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 5 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 5 carbon atoms, a substituted or unsubstituted fluoroalkyl group having 1 to 5 carbon atoms, a polyfluoroalkyl group having 1 to 5 carbon atoms, $-SO_2X_1$, wherein X_1 is a substituted or unsubstituted alkyl group having 1 to 5 carbon atoms, $-SO_2X_1$, wherein X_1 is a substituted alkyl group having

 $1\ \text{to 5}$ carbon atoms, -COZ, wherein Z is a hydrogen atom or a substituted or unsubstituted alkyl group having $1\ \text{to 5}$ carbon atoms, and a halogen atom,

with the proviso that R_1 cannot be a hydrogen atom when R_4 is an alkyl group having 1 to 5 carbon atoms, and R_4 cannot be a hydrogen atom when R_1 is an alkyl group having 1 to 5 carbon atoms; and

 R_2 and R_3 are each independently selected from the group consisting of a substituted or an unsubstituted alkyl group having 1 to 5 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 5 carbon atoms, a substituted or unsubstituted phenoxy group, a substituted or an unsubstituted fluoroalkyl group having 1 to 5 carbon atoms, a polyfluoroalkyl group having 1 to 5 carbon atoms, a substituted or unsubstituted fluoroalkoxy group having 1 to 5 carbon atoms, a polyfluoroalkoxy group having 1 to 5 carbon atoms, a polyfluoroalkoxy group having 1 to 5 carbon atoms, a hydroxyl group, a halogen atom, $-NX_2X_3$, wherein X_2 and X_3 independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 5 carbon atoms, and $-NY_2CONY_3Y_4$, wherein Y_2 to Y_4 independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 5 carbon atoms.

14-16. (canceled)